

U.S. Patent Application Serial No. 10/580,415

Amendment filed May 12, 2008

Reply to OA dated December 28, 2007

AMENDMENTS TO THE SPECIFICATION:

Amend the paragraph beginning at page 7, line 23, as follows:

The cancer diagnostic method described in claim 1 is comprised of;
a process to obtain the sample containing RNA only as a somatic cell and cancer cell fraction from body fluid and a process having a reverse transcription reaction step to generate cDNA using reverse transcriptase from the sample containing RNA and a PCR reaction step utilizing fluorescent dye using the following primers for hTERT , CGGAAGAGTGTCTGGAGCAA (SEQ ID NO: 1) and GGATGAAGCGGAGTCTGGA (SEQ ID NO: 2) to quantify the PCR product amplified by the PCR reaction using fluorescent dye binding to the PCR product.

Amend the paragraph beginning at page 8, line 5, as follows:

The cancer diagnostic method described in claim 2 is comprised ~~[[o]]~~ of;
a process to obtain the sample containing only RNA as a somatic cell and cancer cell component from body fluid, a process having a reverse transcription reaction step to generate cDNA using reverse transcriptase from the sample containing RNA and a PCR reaction step utilizing fluorescent dye using the following primers for AFP, CCAGAACTAGTCCTGGATGT (SEQ ID NO: 3) and CGTGGTCAGTTTGCAGCATT (SEQ ID NO: 4) to quantify the PCR product amplified by the PCR reaction using the fluorescent dye binding to the PCR product.

Amend the paragraph beginning at page 11, line 20, as follows:

Next, PCR reaction of the sample containing RNA was performed using the following primers for hTERT analysis: CGGAAGAGTGTCTGGAGCAA (SEQ ID NO: 1) and GGATGAAGCGGAGTCTGGA. (SEQ ID NO: 2) The amplified PCR product was quantitatively measured using a fluorescent dye binding to the PCR product. For AFP analysis, the following primers, CCAGAAACTAGTCCTGGATGT (SEQ ID NO: 3) and CGTGGTCAGTTTGCAGCATT (SEQ ID NO: 4) are used to perform PCR reaction, and then the amplified PCR product was quantitatively measured using a fluorescent dye binding to the PCR product.

Amend the paragraph beginning at page 12, line 22 to page 13, line 2, as follows:

At this time, the reaction is carried out 1) at 50°C for 30min as a reverse transcription reaction step, 2) at 95°C for 15min as an activation step, 3) 55 cycles of 3-step PCR reaction. The annealing temperature varies depending on the primers to be used. For example, CGGAAGAGTGTCTGGAGCAA (SEQ ID NO: 1) and GGATGAAGCGGAGTCTGGA (SEQ ID NO: 2) are used as hTERT primers and CCAGAAACTAGTCCTGGATGT (SEQ ID NO: 3) and CGTGGTCAGTTTGCAGCATT (SEQ ID NO: 4) are used as AFP primers. The data obtained will be compared and analyzed with the optimum cutoff values (some types of cancers use a plurality of cutoff values of markers to increase its specificity) statistically processed for each type of tumor to determine the presence or absence of cancer cells in the patient blood.